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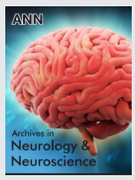

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Mini Review

On motivation as a Target for Intervention in Anorexia Nervosa

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Abstract

Anorexia Nervosa (AN) is a serious psychiatric illness associated with high chronicity and mortality. One of the main issues preventing recovery is the ambivalent nature of the disorder. Increased motivation for change is an important prognostic factor, and opposite, lack of motivation is hindering recovery and may be part of explaining the poor prognosis. Thereby, understanding motivation in Eating disorders (ED) and factors influencing it is an important task for research. Thus far, studies investigating the effects of Motivational Interviewing and Motivational Enhancement Therapy, which are techniques to promote behavioral change in AN, are scarse and most often finding no effect in AN, as well as in other EDs. The psychopathology of AN may partly explain resistance to change, and comorbidity may further enhance this. This review presents some factors that may influence motivation for change in AN.

Keywords: Anorexia nervosa; Eating disorders; Motivation; Behavioral change

Abbreviations: AN: Anorexia Nervosa; ED: Eating Disorders; MI: Motivational Interviewing; MET: Motivational Enhancement Therapy

Introduction

Anorexia Nervosa (AN) is characterized by underweight, a restriction of food intake, a phobia for weight gain and fattening food, body image disturbance and frequently an excessive amount of exercise [1]. The prevalence of AN is approximately 0.9% in women and 0.3% in men [2]. In spite of long-term and multifaceted treatment, the prognosis is poor and recovery is slow and incomplete. Life-threatening medical complications often occur, and it carries the highest death rate (approximately 7%) among psychiatric disorder [3,4].

Appart from the diagnostic criteria described above, AN is also characterized by signs of ineffectiveness, perfection, denial of hunger signals, interpersonal distrust, and lack of interoceptive awareness. Patients with AN are frequently emotionally avoidant, dyregulated and anxious. Haynos et al, has presented a transactional model of emotion dysregulation in AN that emphasizes emotion vulnerability, dysregulation, behavioral dysregulation (e.g., disordered eating behaviors), and invalidating environmental responses [5].

Psychologically, AN is as a disorder where there is an inner struggle between desires, thoughts and feelings that may be described as egosyntonic, i.e. aiming at creating a sense of inner harmony, and similarly, experiences and perceptions such as pain that may be described as egodystonic, i.e. felt as disharmonic. The egosyntonic desire to be thin requires strict routines, which demands control, which in turn consumes psychological energy, which parallels with the state of under-nutrition, eventually resulting in medical instability or complications, social isolation, and psychiatric symptoms and signs. External feedback and moments of regrets leads to attempt to normalize the behavior and leeting go of the drive to remain thin, leading to a state which may be described as egodystonic, since is going against the patient's wish. When the patient is in this egodystonic state, signs of ambivalence occurs. It is in this state where the patient is amenable to motivational interventions [6].

Motivation

The individual motivation for change is an essential psychological factor to enable modification of unhealthy behaviors and habits [7]. Motivation is today seen as a psychological dynamic state that may change over time, being dependent on both a multitude of interpersonal and intrapersonal factors. Thereby, it

may be possible to influence motivation since it would consequently be seen as an interpersonal accessible factor that may be modified during a change process [8]. Influencing motivation to change may enable further behavioral change via psychotherapeutic methods.

The Change Process

This Transtheoretical [8-10] model is based on research done by James Prochaska and Carlo DiClemente originally on 'self-changers' that were able to stop smoking or drinking and describes the following stages of change: a) precontemplation, b) contemplation, c) preparation, d) action, and e) maintainance. In precontemplation, the individual is not in a state of change; in the contemplation stage, the individual is able to consider change but is ambivalent about it; in the preparation stage, the negatives of a behaviour is recognized and balanced toward the benefits, and the individual is less ambivalent about the change, and may start to initiate a change process. Still, ambivalence may be high and the risk of relapsing into unhealthy behavior is high; in the action stage, the individual is actively changing the behaviour; in the maintainance stage, the individual have learnt to handle and avoid temptations to relapse, and is able to use new ways of coping. Temporary slips into unhealthy behavior may occur, but this is not seen by the individual as a failure.

In view of the often found low degree of motivation in AN, it is relevant to refer to the self-determination theory [11], which distinguishes between different types of motivation and includes underlying reasons for behavioral engagement [12,13]. This theory states that an individual that lacks intention to act is called amotivated [14]. They are unable to identify reasons to why they should act and tend to have low intentions and poor uptake and adherence to health behaviors [15]. Parallels between the precontemplation and the amotivated state have been drawn [15].

An issue relevant for AN is that none of the models provide a clear path out of the amotivated and precontemplative states. The adopters of the transtheoretical model proposes the targeting of experiential processes that through exposure to and involvement in disease relevant information will lead to consciousness raising, a method which have shown to have limited effect on changing behavior in individuals with low motivation [16-18],

Motivation for Change in Anorexia Nervosa

The egosyntonic features of AN is to others seen as a lack of motivation to gain weight and towards recovery. Being egosyntonic, they do not view their anorectic behaviors as problematic [19]. Instead, many AN patients view their behaviors as positive, frequently as the only way to find some degree of satisfaction, which thereby differentiates AN from most other mental health disorders. Attempts to treat AN in traditional psychiatry aiming at underscoring and taking action towards unhealthy behaviours, assuming an immediate alliance with the patient, becomes challenging in view of the unwillingness of the patient to give up their behaviors. However, the opportunity in AN to reach a potential state of readinesss for change lies in the ambivalence that arises from the consequences of the demanding process of maintaining anorectic behaviours. Qualitative studies have exemplified the ambivalence in patients with AN [20,21].

Frequently, ambivalence in AN is felt in relation to the level of control patients with AN experience [22]. Typically, AN may have started as a way of feeling in control but as the behaviours became more entrenched, the sense of loss of control e.g. of their restriction, emerges. Successively, AN patients experience this as being controlled by their behaviours. This often is the starting point for treatment seeking.

Comorbid Disorders may Influence Motivation to Change in Anorexia Nervosa

Depression has been suggested to influence outcome of Anorexia nervosa [23], and thereby may have a negative impact on motivation to change behavior. The self-devaluation and negative cognition characterizing depressive states may further influence the already ambivalent patient with AN. Together, the AN and comorbid depression may enhance lack of motivation to change and lead to a higher risk of complications such as suicidality. Since depression is a frequent comorbid disorder in AN [24], and amenable to treatment, efforts to identify and separate depressive elements from the ED itself should strongly be encouraged.

Another comorbid disorder that frequently occur in ED is personality disorders, especially emotional dysregulation disorder (EDD; [25]). In itself, emotional dysregulation may be part of the spectrum of features that constitutes ED. However, more pronounced traits of emotional dysregulation with impulsiveness, anger outbursts, self-harm, frequent interpersonal conflicts, difficulties in handling negative emotions, suicidal threats, represents the presence of a comorbid disorder that frequently complicates treatment attempts of ED such as AN. The nature of the personality disorder may enhance the negative interpretation of experienced patient feedback and obfuscate interactions and therapy endeavors. Identification will help select proper treatment which may include both Dialectic behavioral therapy and psychopharmacological treatment.

A trait sometimes found among in-patients with AN is autism spectrum symptoms and behaviours [26]. Patients suffering from AN with autism often have specific challenges with regard to motivation to eat, which may lead to severe starvation and high risk of medical complications. Rigid patterns of thinking, with low degree of mental flexibility, together with seemingly low or even non-existent motivation to change behaviours resembles a state of amotivation, albeit this state also may be present in non-autistic individuals. Essential for progress is to assess the profile of communication, inter-, and intrapersonal skills, type and level of mentalization, as well as to identify specific drivers for remaining in the amotivated state. This will aid in developing a strategy to catalyze a change in the autistic individual.

In cases of AN and schizotypia, or AN and schizophrenia, there may be severe and lasting challenges for the suffering individual to

overcome and cope with magical thinking, delusions about food and eating, as well as hallucinations that strive to maintain the disorder. In addition, low degree of motivation or even a state of amotivation may be part of the spectrum of negative sings that may be more or less pronounced in patients with AN. Identifying these traits in AN, if present, will help to both initiate psychopharmacological treatment and provide proper therapy and care. In these instances, cognitive remediation therapy instead of enhanced cognitive behavioral therapy may provide benefits [27].

Therapeutic Methods to Catalyze Change

Less than 50% of patients with AN who turn up for treatment are ready for active change [28]. The disparity between the AN sufferers ambivalence to change and the medical urgency with which change may be required poses many challenges [29].

Motivational Interviewing (MI) is a person-centred, collaborative therapeutic intervention [29,30] that initially was developed for addiction and which has developed further into approaching other disease areas [31]. Essential aspects of MI are autonomy, empathy, and respect for the patients own beliefs and thoughts about change [32]. However, a directive element is also included to elicit and reinforce change talk. In other disorders than ED, a moderate effect size of MI and often long duration of effect have been found, especially in addiction [30,33]. As yet there are few studies done in ED [34] although at least one study describe a moderate to high effect size [35].

Motivational enhancement therapy (MET) is a type of therapy based upon the Trans-theoretical Model of Change and which includes MI to analyze feedback gained from client sessions. MET utilizes motivational strategies to help clients make use of their own skills and capacities to forster change (Miller et al., 1994).

Knowles et al reported that MI and MET improve motivation to change bingeing and reduce actual bingeing behaviour, at the same level as Cognitive Behavioral Therapy (CBT; [36]). However, there was little support for MI and MET in reducing or influencing for compensatory or restrictive behaviors.

Conclusion

Many factors may influence motivation to change in AN, and for the bineging-purging subtype, MI and MET may provide benefits to suffering patients [36]. Apart from that there seem currently to be few motivational methods that influence restrictive behaviors. More research is warrented especially properly designed randomized trials, longitudinal studies, and studies weighing in potential influencing factors such as comorbidities.

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Conflict of Interest

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